

## **U.S. CLIMATE BILL WOULD PAY FARMERS TO STORE CARBON IN SOIL**

*By Jim Efstathiou Jr.*

Nov. 1 (Bloomberg) -- U.S. farmers can turn their dirt into cash under climate change legislation that pays them to bury pollution blamed for global warming.

The bill would create a potential \$24 billion-a-year market for credits representing carbon dioxide stored in soil. Senators Joseph Lieberman, an Independent from Connecticut, and John Warner, a Virginia Republican, are co-sponsoring the measure.

"There is a political calculation here to try to increase support for climate change legislation by providing these offset subsidies, in effect, to agricultural concerns," said Tyson Slocum, director of the energy program at consumer advocacy group Public Citizen.

Like other climate change proposals in Congress, the bill allows utilities, refiners and manufacturers to trade credits to help meet new pollution requirements. The legislation, approved in a 4-3 vote today by a Senate subcommittee, gives farmers a stake in the potential market for emission credits.

Carbon dioxide enters soil through plant waste left behind after the harvest. Soil management methods such as no-till or low-till farming reduce the decay of organic matter in soils, increasing carbon stocks.

Additional carbon stored in soil by such methods is counted toward credits. In 2005, farmers in Iowa, Nebraska and Kansas generated \$380,000 selling carbon credits to companies and universities seeking to offset their greenhouse gas emissions.

Under mandatory emission limits, potential sales of credits from carbon buried in cropland could be between \$2.6 billion and \$24.3 billion annually, depending on credit prices, according to a report from the 21st Century Agricultural Policy Project, a group led by former Senators Bob Dole and Tom Daschle.

'Huge Market'

"If structured properly, it could create a huge market and bring in a large source of emissions reductions," said Gia Schneider, vice president of energy trading and environmental markets for Credit Suisse.

The bill, introduced Oct. 18, would cut emissions by 63 percent over the next four decades by capping pollution from power plants, refineries and certain manufacturers.

With its nine co-sponsors, the measure is competing with at least seven Senate proposals to cap greenhouse gases.

The legislation was approved by a subcommittee of the Senate Environment and Public Works Committee. Senator Barbara Boxer, the California Democrat who is chairwoman of the full committee, supports the measure.

“If you're looking to establish a broad consensus on any legislation in the U.S. Senate, one of the things you look at is agriculture,” said Paul Bledsoe, spokesman for the bipartisan National Commission on Energy Policy.

Under cap-and-trade programs, polluters must obtain a credit for every ton of carbon dioxide they release into the air. Offset credits from U.S. farms and forests can be used to meet 15 percent of a polluter's cap, and overseas credits can be used for another 15 percent under the Lieberman-Warner bill.

### Potential Storage

The U.S. could store 40 billion to 60 billion metric tons of carbon over 50 years using methods that boost sequestration in cropland and forests, according to a report from the nonpartisan Congressional Budget Office. The report cautions that biological sequestration is “easily reversible” and that stored carbon can be released through fires, pest outbreaks or global warming.

“We're not a big fan of offsets,” Slocum said. “Financial incentives for energy efficiency are the best return on any sort of climate change investment rather than these land use or agricultural offsets.”

Opposition to offset credits ignores recent improvements in methods to measure and monitor actual emissions reductions, said Sara Hessenflow Harper, a senior associate with The Clark Group, a Washington-based consulting firm.

“I've been on the ground,” said Harper, a former legislative aide to Senator Sam Brownback, a Republican from Kansas. “I've seen the soil samples. I've seen the instruments that measure carbon. You're doing it because it's real.”

### Lowering Costs

Offsets can lower the cost to utilities of meeting new pollution requirements, said Elizabeth Thompson, legislative director for Environmental Defense, an advocacy group. It will be years before power plants can use technology to capture and store carbon from power plants that burn coal.

Allowing polluters to use some domestic and international offsets would lead to carbon credit prices of about \$14 per ton in 2015 and about \$77 per ton in 2050, according to a

U.S. Environmental Protection Agency analysis. If offsets are not allowed, prices jump to \$40 in 2015 and \$219 in 2050.

“We view offsets as a very useful bridge,” Thompson said.

Farm bureaus in Iowa and North Dakota already serve as brokers, aggregating carbon credits and selling them on the Chicago Climate Exchange. The Montana Grain Growers Association says there should be no limit on U.S. offsets.

#### Active Pursuit

Recent studies “provide answers to those critics that claim agricultural offsets are unreliable,” Will Roehm, association vice president, told a Senate panel last week. “Agriculture should support, and actively pursue, as open and unrestricted a greenhouse gas cap-and-trade market as possible.”

The criteria for offsets from agriculture and forestry projects are included in the text of the bill giving those sectors “more detail to rely on,” said David McIntosh, Lieberman's environmental counsel. Credits from other projects such as wind farms may be permitted after a regulatory review.

“We are political calibrators here, calibrating between those who are skeptical of offsets and those who demand them,” McIntosh said. “By limiting offsets, establishing criteria for eligibility, we believe we have calibrated the bill between those who are skeptical and those who want them.”